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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,618	06/26/2001	Frederic Gagnon	051481-5071	8348

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EXAMINER	
KRISHNAMURTHY, RAMESH	

ART UNIT	PAPER NUMBER
3753	12

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/888,618	GAGNON, FREDERIC
	Examiner	Art Unit
	Ramesh Krishnamurthy	3753

-- Th MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3,4 and 13-18* is/are allowed.

6)☒ Claim(s) *1, 2, 5- 12, 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 June 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *11* .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This office action is responsive to amendment filed 01/28/2004.

In view of the new grounds of rejection set forth below, PROSECUTION IS HEREBY REOPENED and the finality of the previous office action has been withdrawn.

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,648,019 ('019 patent).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations in claims 1 and 19 of the instant application are readable on the limitations recited in claim 1 of the '019 patent. The "passages" in the '019 patent reads on the "channels" in the instant application. The limitation "coupled" in Col. 6, line 8 of the '019 patent is readable on the limitation "coupled contiguously" recited on line 14 of claim 1 and line 12 of the instant application.

3. Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,648,019

('019 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations in claim 2 of the instant application are readable on the limitations recited in claim 13 of the '019 patent.

4. Claim 5 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,648,019 ('019 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations in claim 5 of the instant application are readable on the limitations recited in claim 14 of the '019 patent.

5. Claim 8 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,648,019 ('019 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations in claim 8 of the instant application are readable on the limitations recited in claim 16 of the '019 patent.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 5 – 9 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by de Versterre et al..

The patent to de Versterre et al. discloses (Figs. 1 – 5) a flow controller valve comprising:

An inlet (14) disposed along a first axis;

At least two channels ((23) in each module (11)) in communication with the inlet (14), the at least two channels ((23) in each module (11)) disposed along a second axis;

At least one mass sensor (77) disposed proximate at least one (23) of the at least two channels;

A seat portion (40) disposed between the inlet (14) and one channel (23) of the at least two channels;

At least two closure members (32) (one in each module (10, 11)), one of the at least two closure members disposed proximate one channel (23) of the at least two channels, the other ((32) in the adjacent module (10,11)) of the at least two closure members disposed proximate the other channel ((23) in the adjacent module (11)) of the at least two channels, each closure member movable to a plurality of positions, a first position permitting fluid flow between inlet and each channel and a second position preventing such flow (Col. 4, lines 4 – 16); and

At least two actuators ((57-70) in each module (10)) coupled to a respective one (32) of the at least two closure members, the at least two actuators responsive (via (54) – the chassis module of electronic components, see Fig. 5) to one of the mass sensors (77) in each channel of the at least two channels to move a respective one of the at least two closure members between the first and the second position.

It is noted that the illustrative example disclosed in de Versterre et al. pertains to using the valve with a liquid but the valve is usable with any fluid including air. The recitation of "fuel cells" in the preamble of claim 1 pertains to intended use of the device claimed and as such is not given any patentable weight in this office action.

Regarding claim 2, it is noted that the valve seat (40) is annular in nature and is disposed relative to a third axis that is transverse to the first axis (of channel (14)) and the second axis (of channel (23)).

Regarding claim 5, it is noted that the closure member (32) does move along the third axis between first and second positions (Fig. 4 and Col. 4, lines 4 – 16).

Regarding claim 6, it is noted that each (23) of the at least two channels comprises an inlet portion (near seat (40)) that is transverse to the first axis and an outlet portion (near (22)) that is disposed along a fourth axis, that is spaced from the first axis by a distance, the distance containing the seat portion (40).

Regarding claim 7, it is noted that the seat portion (40) has a seating surface which the closure member contacts (Fig. 4) in a closed position thereby forming a seal.

Regarding claim 8, it is noted that the actuator (57 – 70) comprises (Fig. 4) a sliding bearing (79), the sliding bearing configured to permit the closure member to reciprocate between the first and second positions.

Regarding claim 9, it is noted that the actuator (57 – 70) comprises a housing (See fig. 4) (50, 18, 19) the housing having a first wall (a portion of (50) and the corresponding part of (11)) and second wall (the right descending wall portion of (50) near (51)) along the third axis, a third wall (41) disposed along the first axis, a fourth wall (18) along the fourth axis, the first and the third walls formed as part of the inlet portion and the second and the fourth walls formed as part of the outlet portion.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 10 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Versterre et al. as applied to claims 1, 2 and 5 – 9 above.

Regarding claims 10 and 11, it is noted that de Versterre et al. discloses a sensor cap (38) that houses the various electrical connections associated with the actuator. At the time the invention was made it would have been a matter of obvious design choice to a person ordinary skill in the art to place the sensor cap configured to couple with the first and second walls of the actuator because the applicant has not disclosed that such a placement provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the applicant's invention to perform equally well with the sensor cap placed as in the device of de Versterre et al. since a mere change in the position of the sensor cap would not alter the functioning of the device of either the applicant or that of de Versterre et al..

Regarding claim 12, it is noted that in de Versterre et al. the first and third walls of each actuator is parallel to the corresponding walls of the other actuator of the at least two actuators. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to orient the actuators such that the first and third walls of each actuator is orthogonal to the corresponding walls of the other actuator of the at least two actuators because the applicant has not disclosed that such a placement provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would

have expected the applicant's invention to perform equally well with the actuators placed as in the device of de Versterre et al. since a mere change in the position of the other of the at least two actuators in relation to one actuator would not alter the functioning of the device of the applicant.

10. Claims 3, 4 and 13 – 18 are allowed.

Response to Arguments

11. Applicant's arguments filed 01/28/2004 with respect to claims 1, 2, 5 – 12 and 19 have been fully considered but they are not persuasive. Applicant is arguing that the de Versterre reference (US 4,399,836) discloses the actuator to be abutting the closure member whereas each of the claims 1 and 19 in the instant invention recites the actuator to be "coupled contiguously" to the closure member. In response, it is noted that "coupled contiguously" and abut mean the same since contiguously means, *"sharing a boundary" as per Webster's II New Riverside University Dictionary (ISBN 039533957X)*. Thus the coupling claimed in Claims 1 and 19 of the instant invention is the same as that disclosed in the de Versterre reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Scherbel, can be reached on (703) 308 - 1272. The fax phone

number for the organization where this application or proceeding is assigned is (703) 872 – 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.

Ramesh Krishnamurthy
Examiner
Art Unit 3753

David A. Scherbel
Supervisory Patent Examiner
Group 3700